OGSI

Oxygen Generating Systems, Inc.

Pressure Swing Adsorption Technology

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If you use more than one cylinder of oxygen per week, ***OGSI*** can provide an oxygen generator that will pay for itself in less than two years. The generators can be sized for various requirements starting at two standard cubic feet per hour (SCF/Hr) up to 5,000 SCF/Hr.

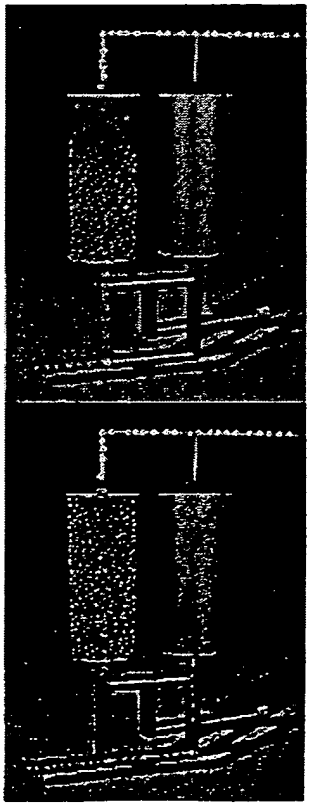
By connecting the ***OGSI*** generator to your air supply (systems with air compressors are available) you can produce oxygen on demand at considerable savings using Pressure Swing Adsorption (**PSA**) Technology.

Stage 1

Compressed air is fed into the first molecular sieve bed. Nitrogen is trapped, while Oxygen is allowed to flow through.

Stage 2

When the sieve in the first bed becomes full of nitrogen, the airflow is then directed into the second bed.

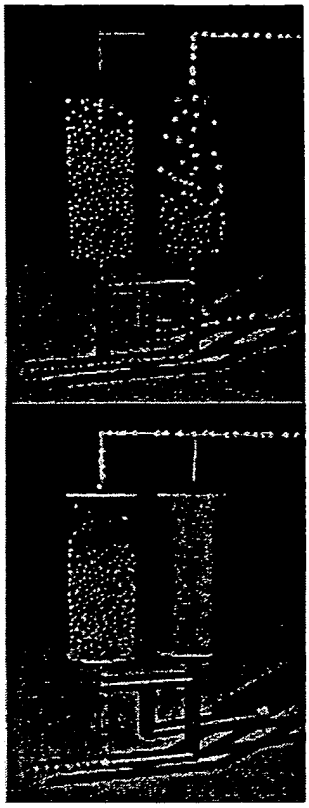


Stage 3

As the second bed separates the oxygen from the nitrogen, the first bed vents its nitrogen into the atmosphere.

Stage 4

Compressed air is once again fed into the first bed, and the process is repeated continuously. A constant flow of oxygen is produced.



The air we breathe contains roughly 78% nitrogen, 21 % oxygen, .9% argon and the balance is other gases. The oxygen is separated from the air using PSA Technology. The process centers around a molecular sieve known as Zeolite.

At high pressures the sieve adsorbs or attracts nitrogen, and at low pressures it desorbs or releases nitrogen. The ***OGSI*** generator consists of two tanks filled with sieve. As high pressure air (about 70 psi) is introduced into the first tank, it passes through the sieve and nitrogen is adsorbed. The remaining oxygen and argon are piped to a buffer or storage tank.

Just before the first tank becomes completely saturated with nitrogen, feed air is redirected to the second tank which then repeats the above process. The first tank is then vented to atmosphere which allows the nitrogen to desorb or release from the sieve. To complete the regeneration of the first tank, a small amount of the oxygen is used to purge it. This process is completed over and over again until the demand for oxygen is met. Under normal operating conditions, which includes the use of clean dry air for separation, the sieve will last indefinitely.

Productivity of a PSA generator is dependent on the oxygen purity required. A generator can produce significantly more oxygen at 90% purity than it can at 95.4%, with a relatively small increase in feed air. By means of a PLC or some other micro processor based controller, it is practical on larger generators for the user to change the swing cycles. Purity and flow levels can be selected and optimized based on changing demand variables.

- Product Literature in Adobe Acrobat .PDF Format

Click here for:
Product Specifications
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Product Literature
Technical Information and
Free Model Selection and Payback Software

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OGSI Oxygen Generating Systems, Inc.

Company Info

About Us

Oxygen Generating Systems, Inc. (OGSI) introduces a new line of oxygen generators designed specifically for industrial applications. Incorporating the latest in Pressure Swing Adsorption (PSA) Technology, these PLC controlled generators provide the best oxygen recovery rates for fractional tonnage machines currently available.

OGSI standard oxygen generators make up to 95% pure oxygen on demand (the high purity system can produce up to 99% pure oxygen), eliminating the need, and reducing the cost of bottled or liquid oxygen. OGSI has developed a Windows™ based Payback Analysis Software that is available free upon request. For users of as little as two cylinders of oxygen per week, the program illustrates a payback for the generator in 18 months or less. Larger users can enjoy even greater returns.

Click here for information about our company.

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Contact Information

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United States
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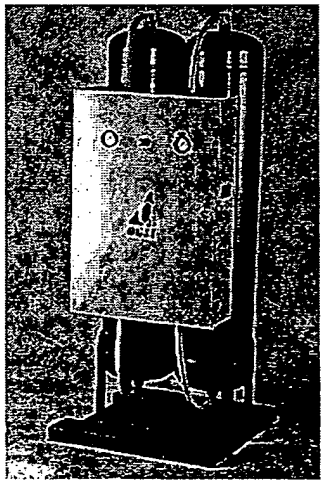
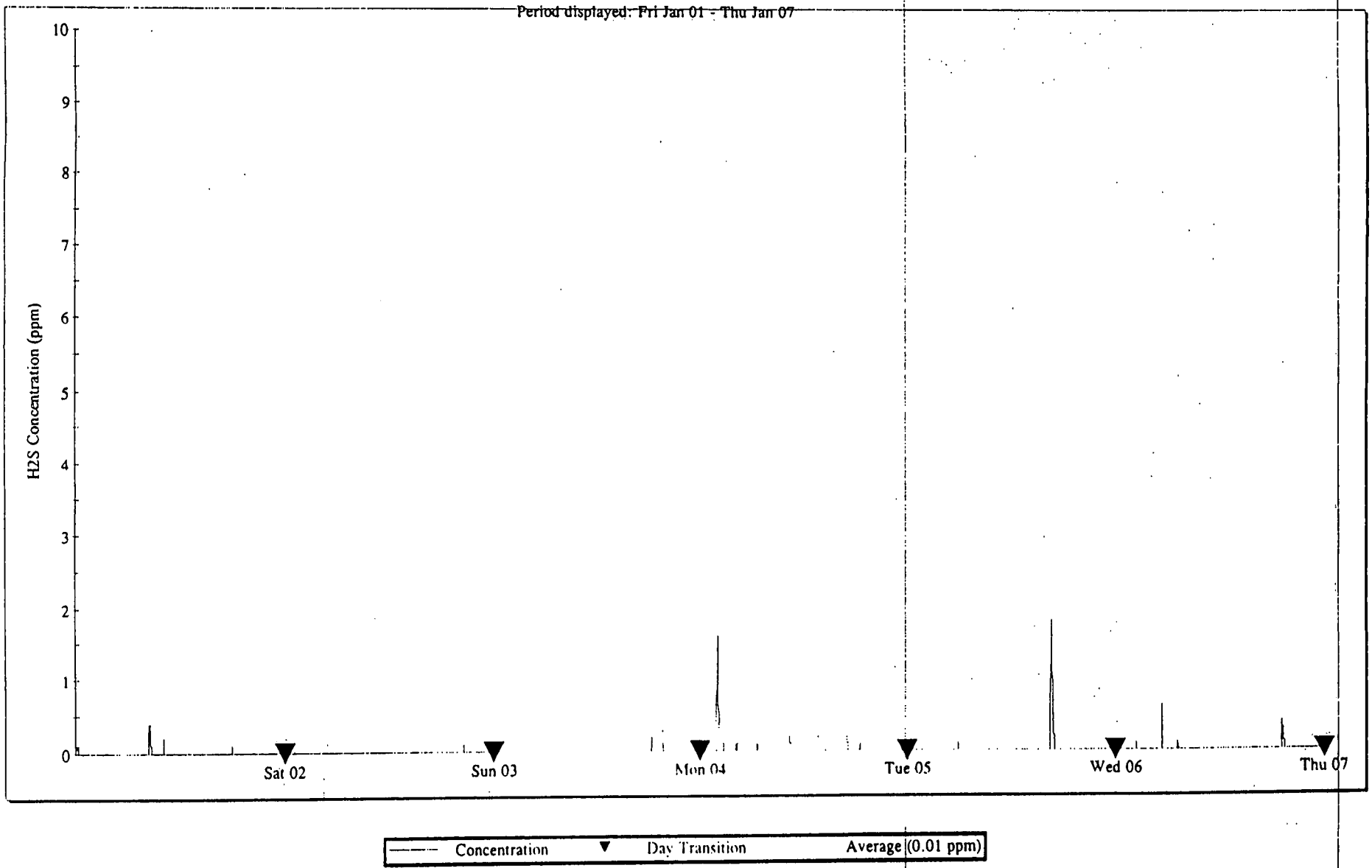
Hot Products

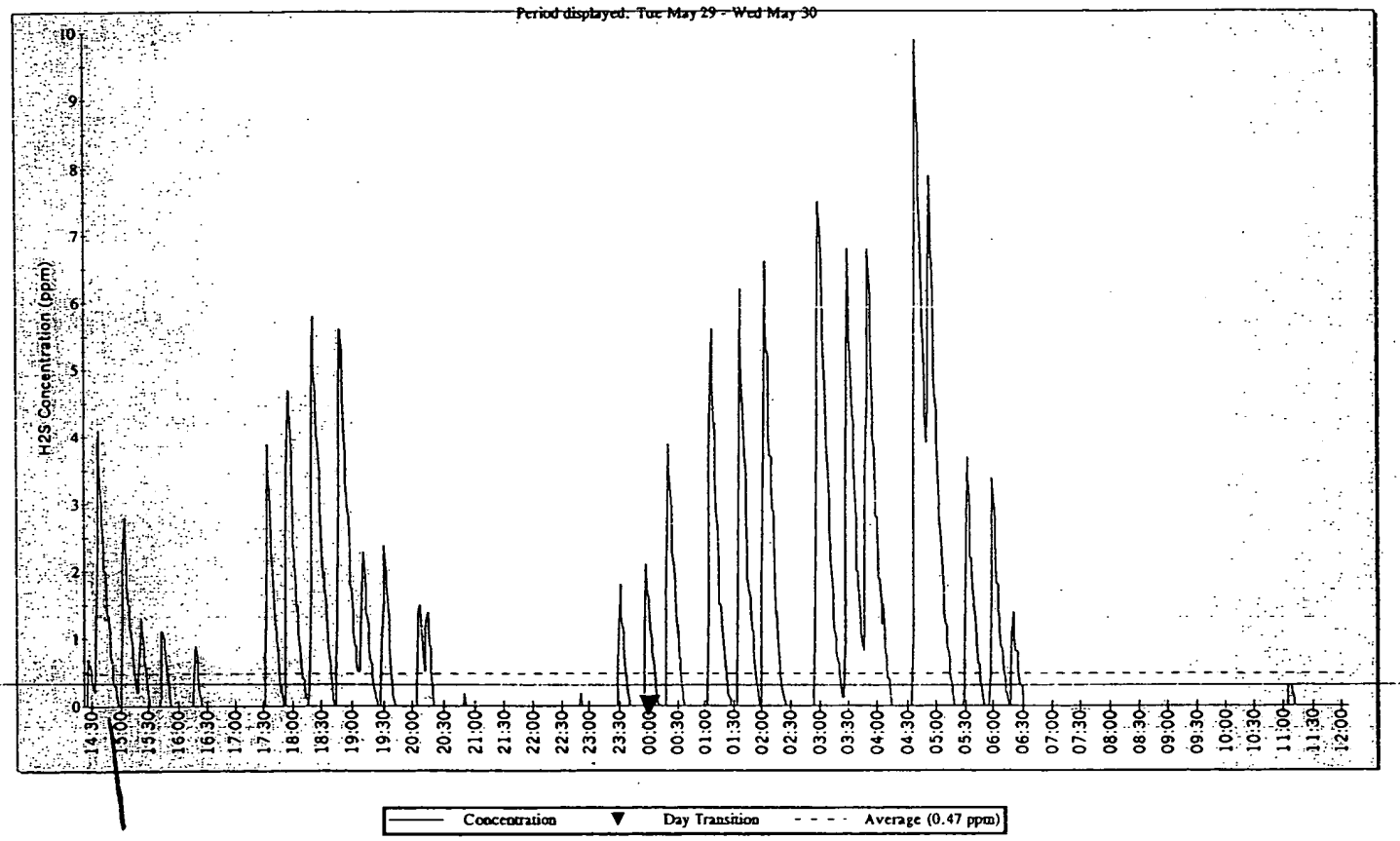


- Oxygen Generators
- Advanced Products and Hospital Systems
- OGSI Model OG-15
- Multi-Ton Oxygen Generator Plants

EBS1161501 OZONE TEST (OdaLog: 3110200)

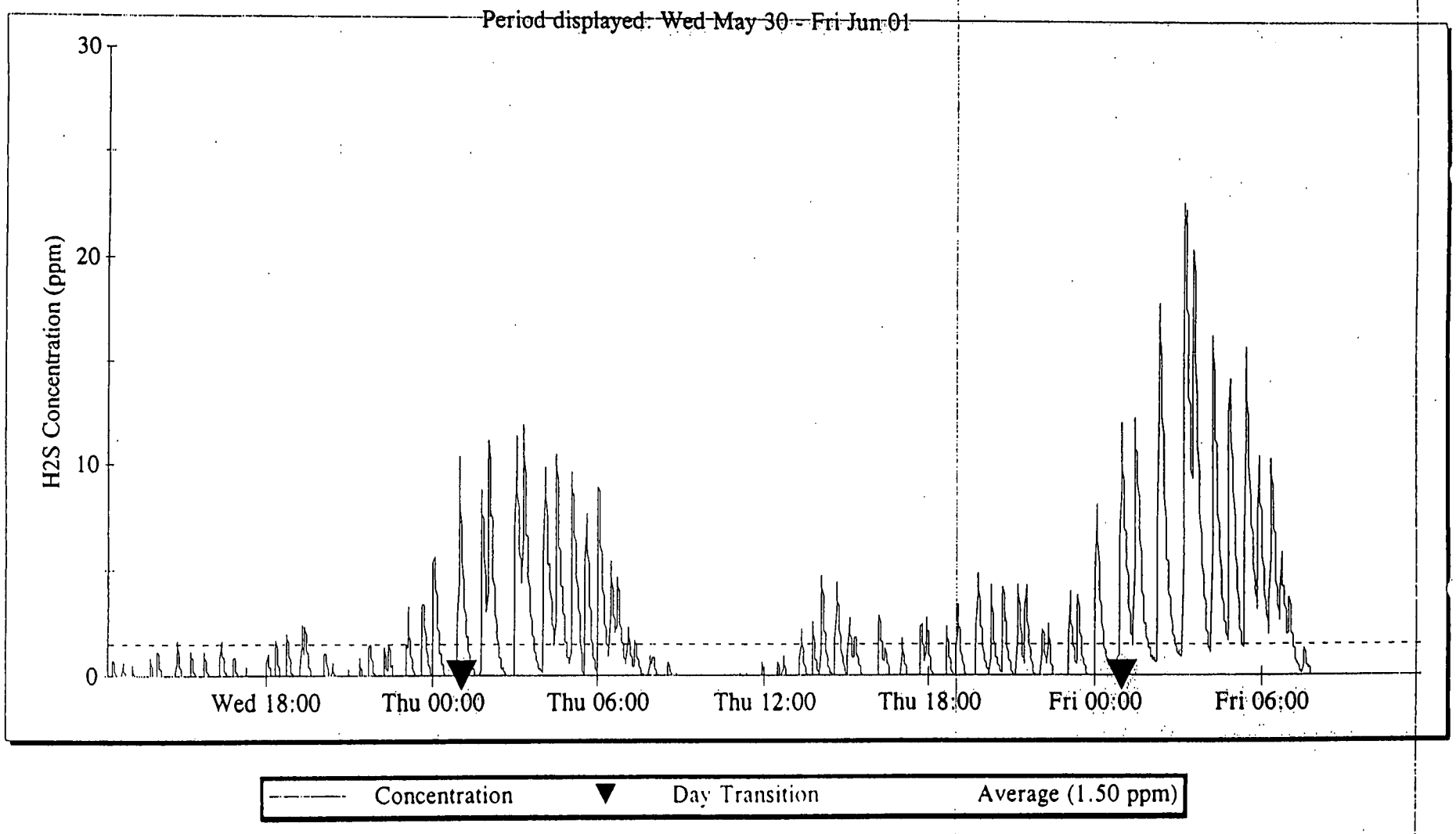


EBS-8-5-29-01 ADDING OZONE (OdaLog: 3021321)

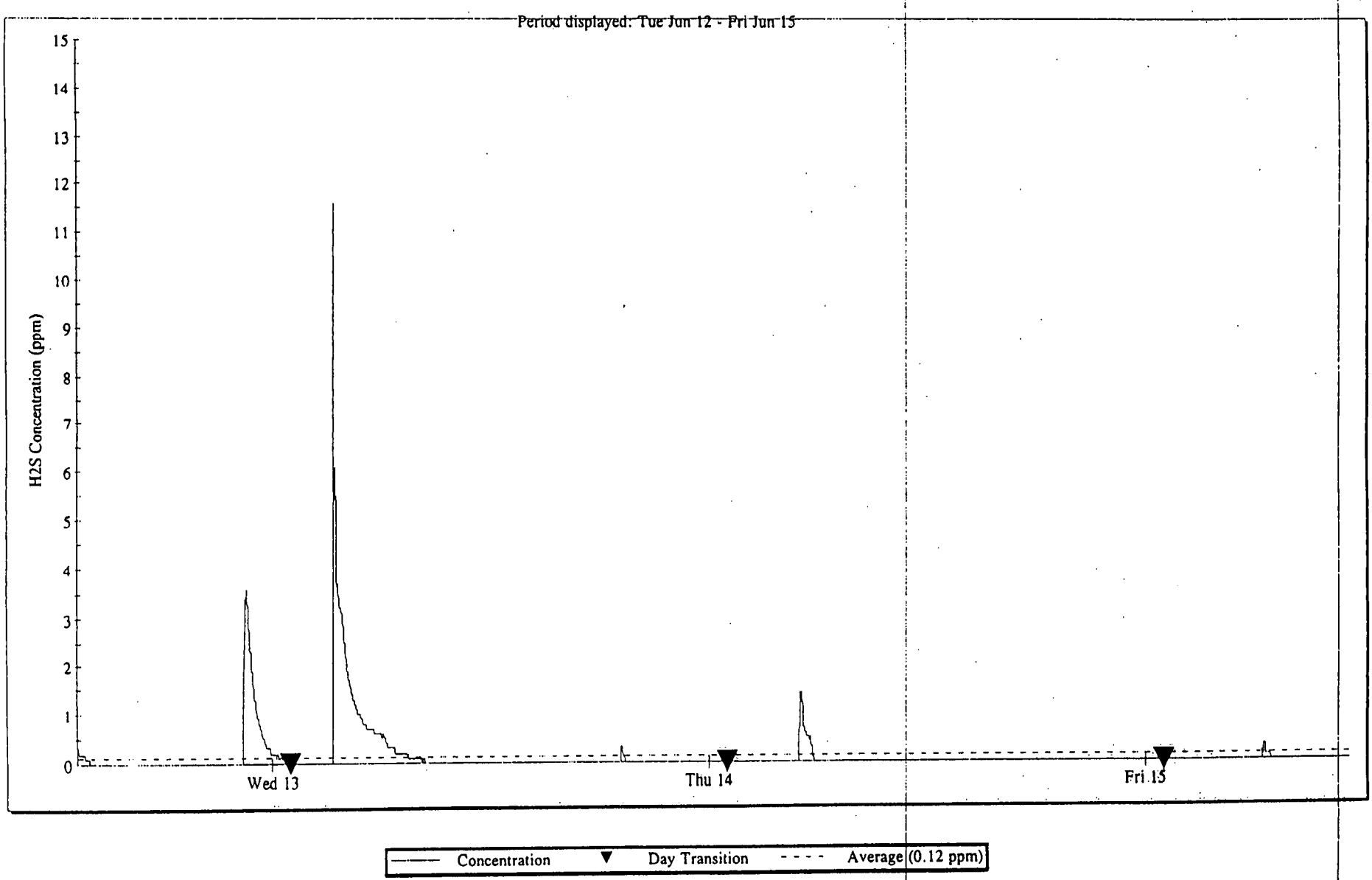


Started
OZONE
Bioxide Raw Out

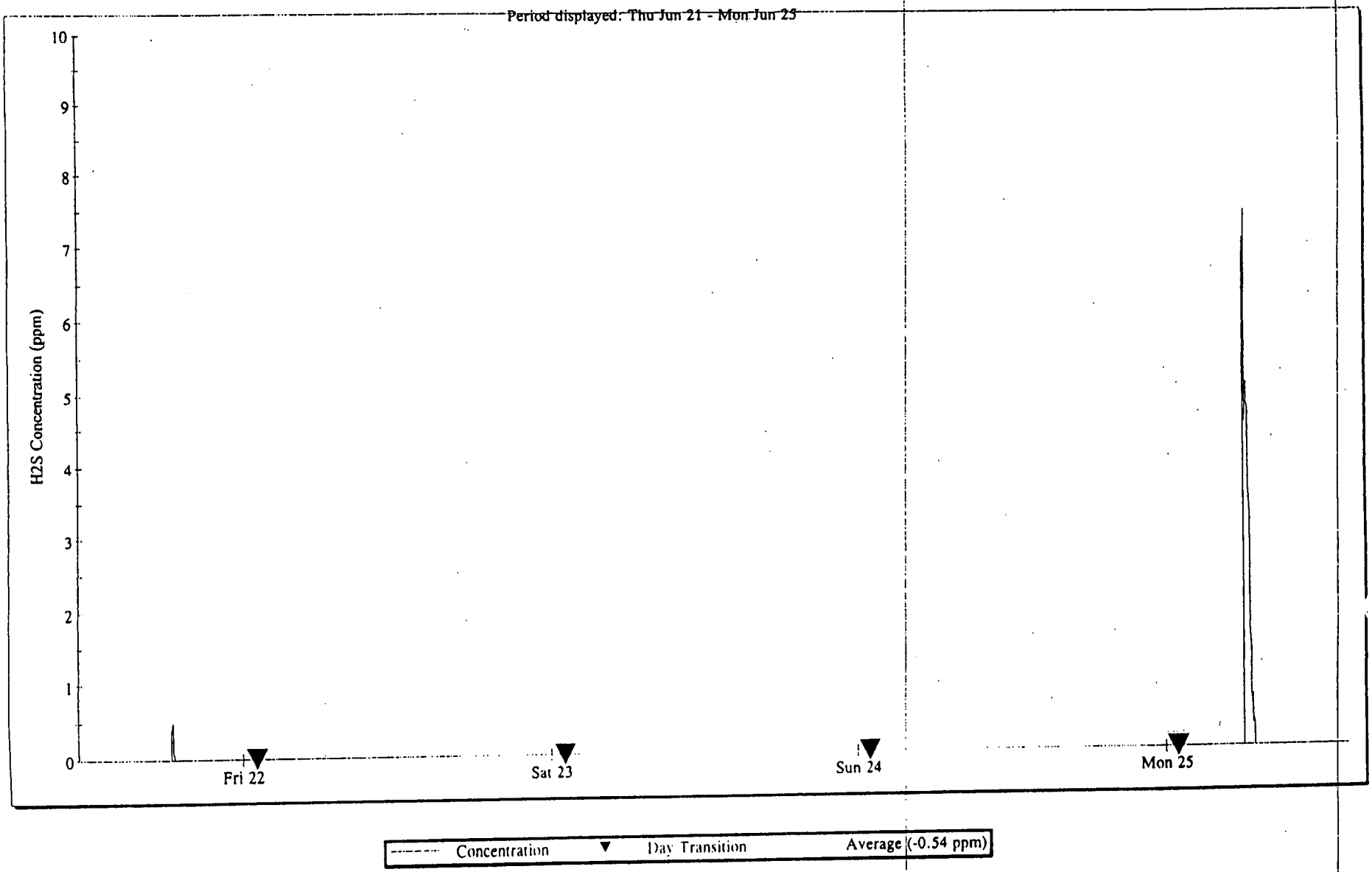
EBS-8-5-30-01 OZONE (OdaLog: 3021321)



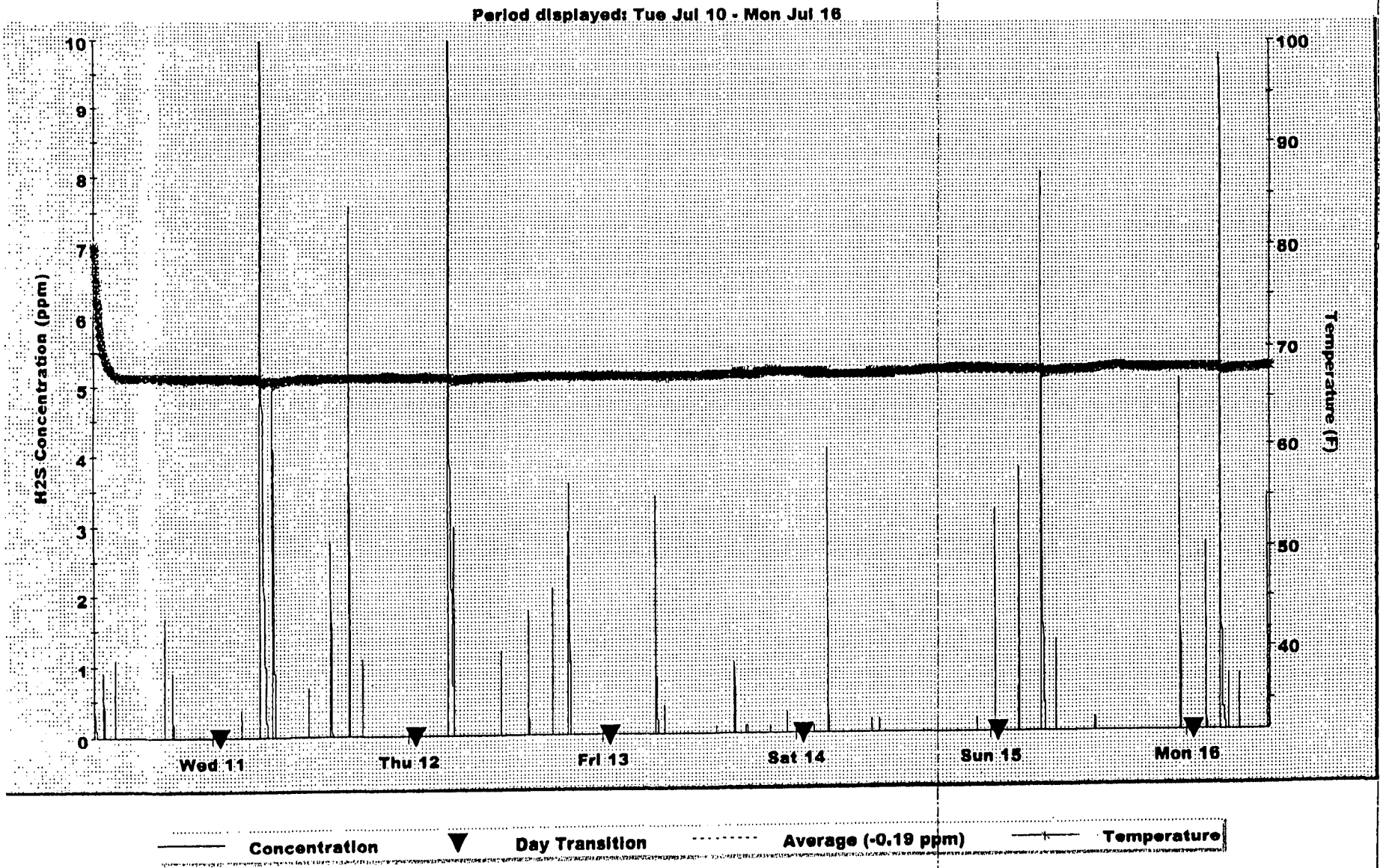
EBS11 061201 OZONE (OdaLog: 3110200)



EBS11062201 (OdaLog: 3021321)

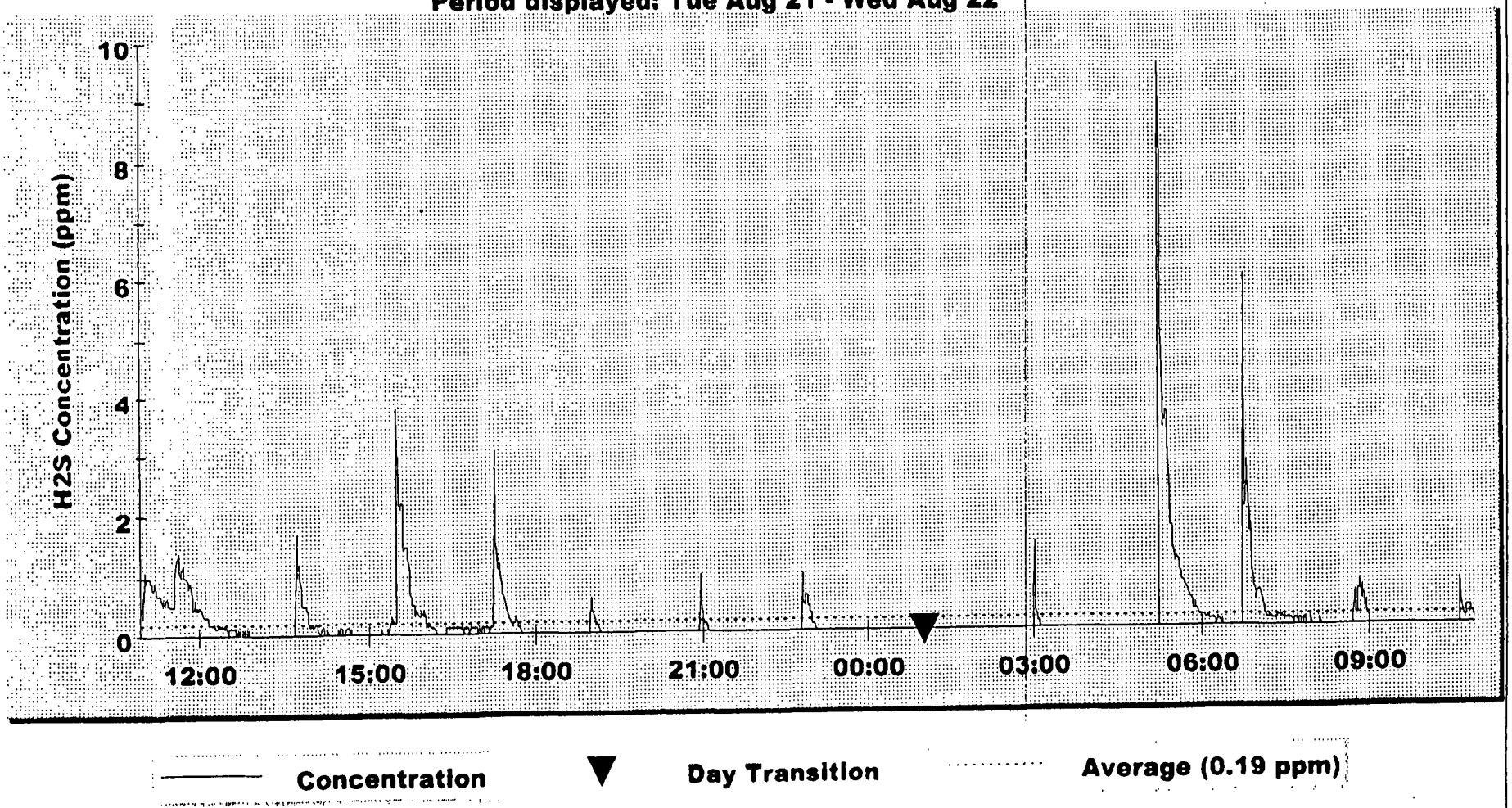


OZONE TEST EBS11-7-10-01 (OdaLog: 3021316)



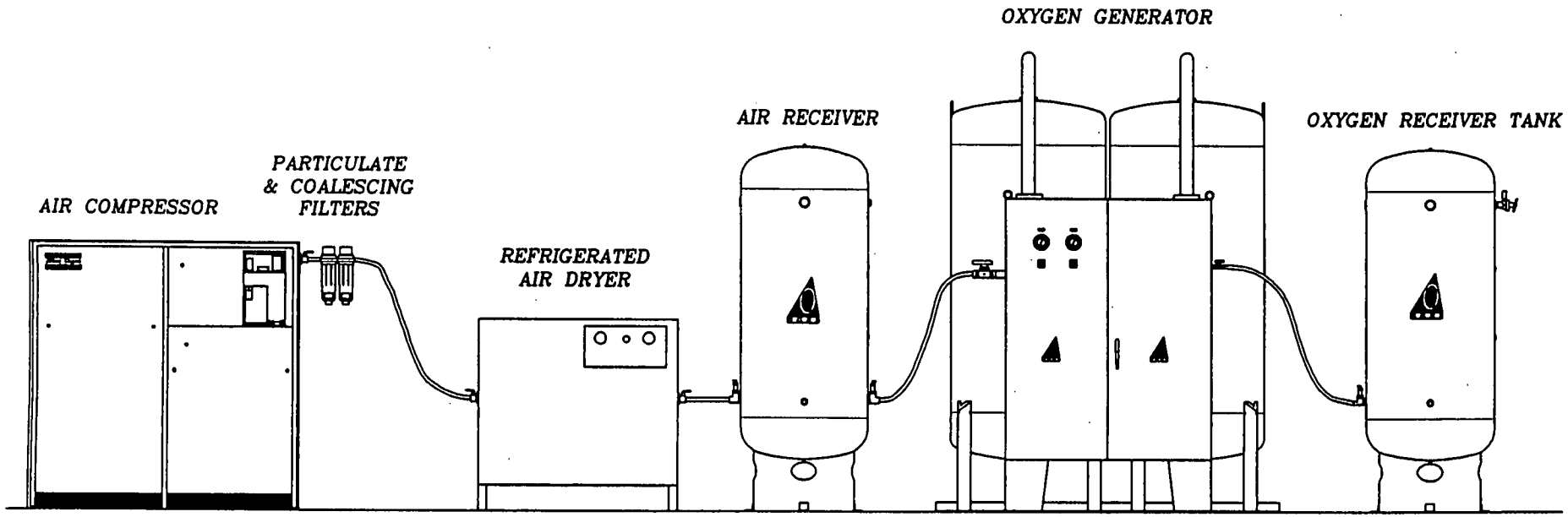
EBS-11-08-21-01 OZONE (OdaLog: 3021321)

Period displayed: Tue Aug 21 - Wed Aug 22



BILL OF MATERIALS			
ITEM	QTY.	DESCRIPTION	OGSI P/N
1			
2			

NOTE:
EQUIPMENT PLACEMENT SHOWN BELOW IS RECOMMENDED.

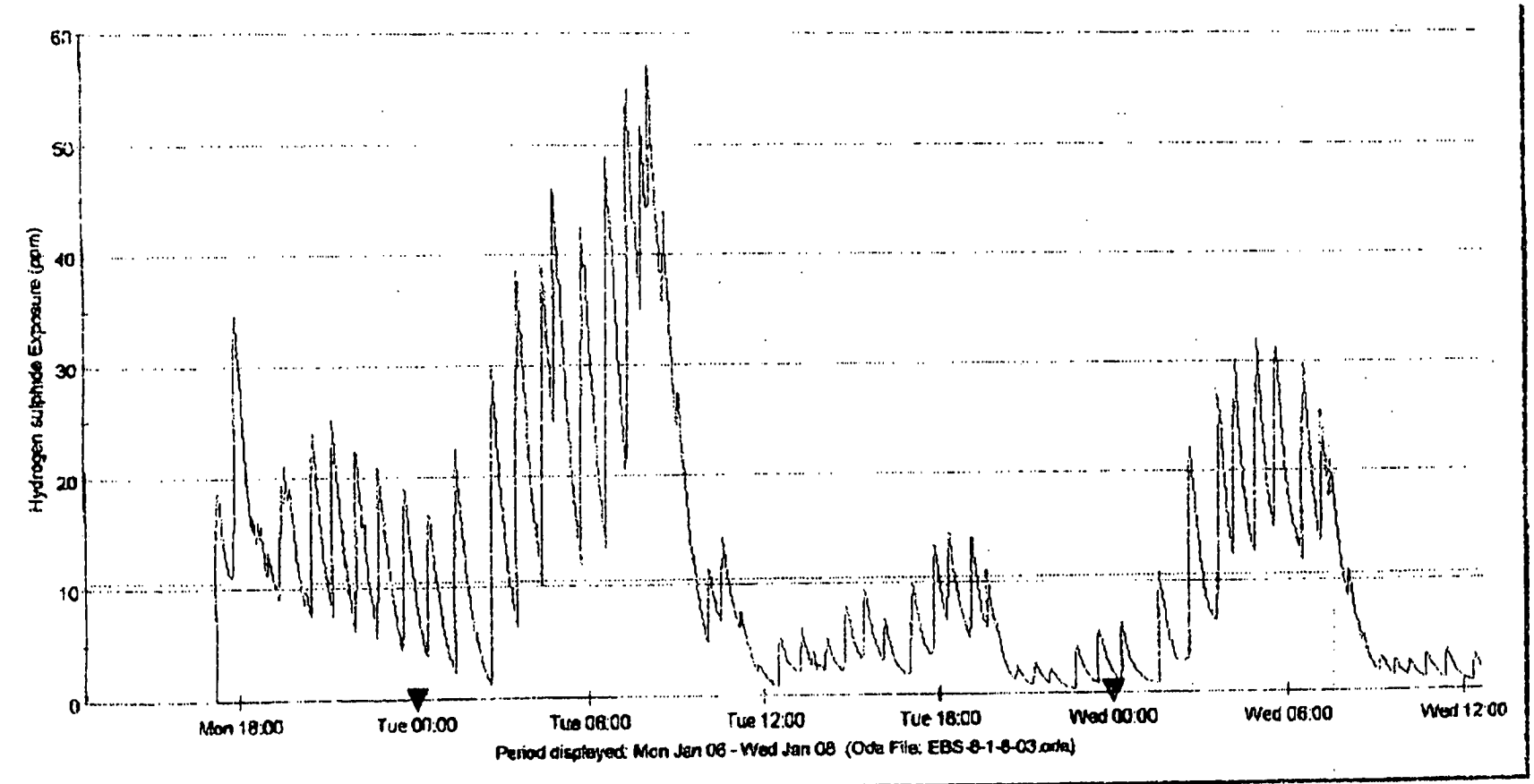


DRAWING NO.: 5000060	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	2221 Niagara Falls Boulevard Niagara Falls, New York 14304 Phone: (716)731-1456 Fax: (716)731-1356 Toll Free (800) 414-OGSI	TITLE: TYPICAL EQUIPMENT LAYOUT w/ SEPERATE DRYER		
DRAWN BY: K.C. ZANGHI DATE: 03/29/00	TOLERANCES ON FRACTIONS ±1/64 DECIMALS .XX ±.01 .XXX ±.005 ANGLES ±1°				
ENGINEER: J.M. McMAHON	REMOVE BURRS & BREAK SHARP EDGES 1/32 MAX. ALL DIMENSIONS TO BE CONCENTRIC WITHIN .010 T.I.R. CHAMFER ALL MALE THREADS 45°x90° TO MINOR DIAMETER COUNTERSINK ALL FEMALE THREADS 90°x110° TO MINOR DIAMETER	THIRD ANGLE PROJECTION	PROJECT: NA		
CLASS CODE: MANUFACTURING			EFFECTIVITY OR SERIAL NO.: 12/06/96	SIZE/SCALE: D12 / NTS	SHEET: 1 OF 1

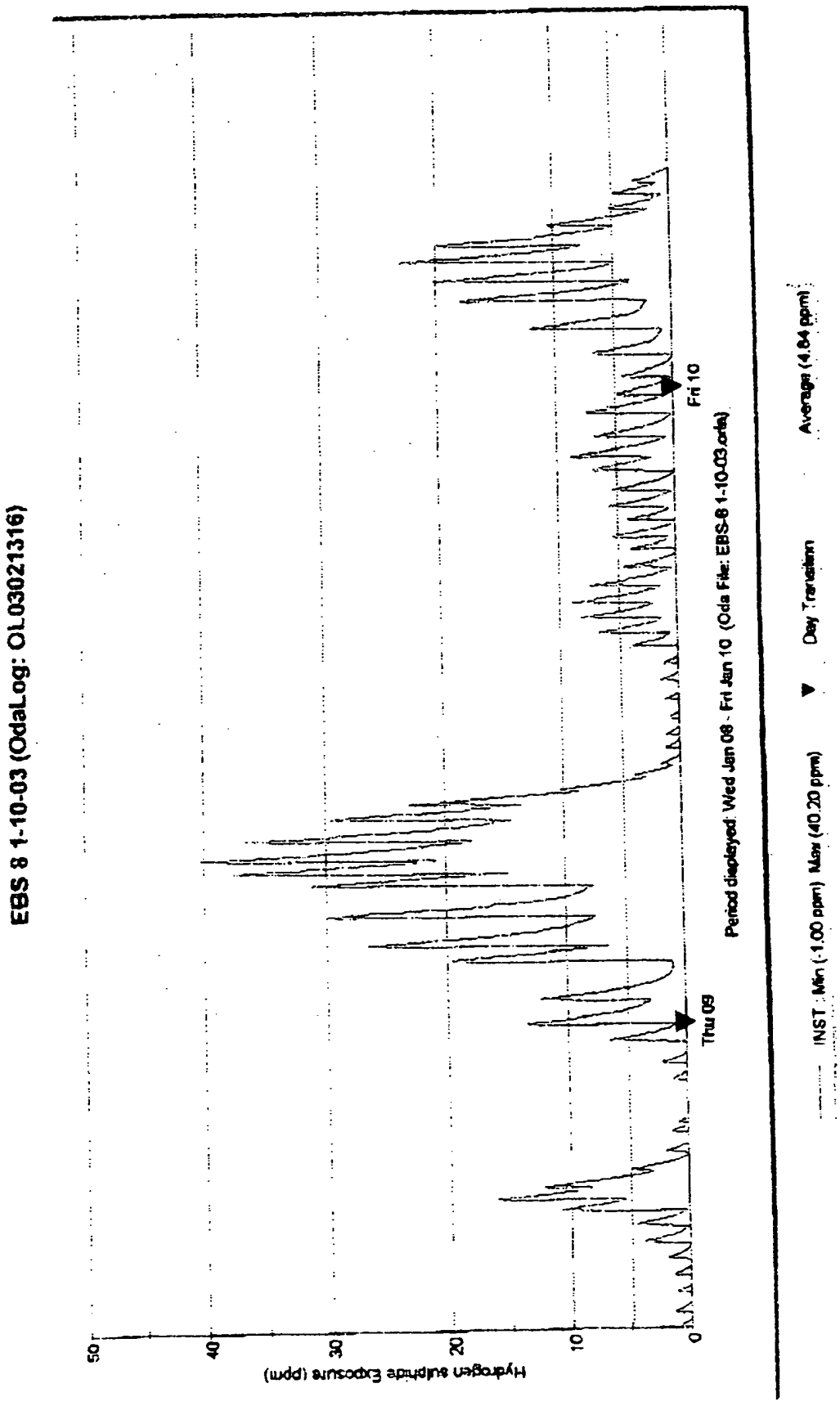
LTR	ECN	DATE	BY
REVISIONS			

Oxygen High pressure System Results Att. Scott Deckert

EBS-8-1-8-03 THIS IS WITH THE O2 GENERATOR RUNNING (OdaLog: OL05102433)

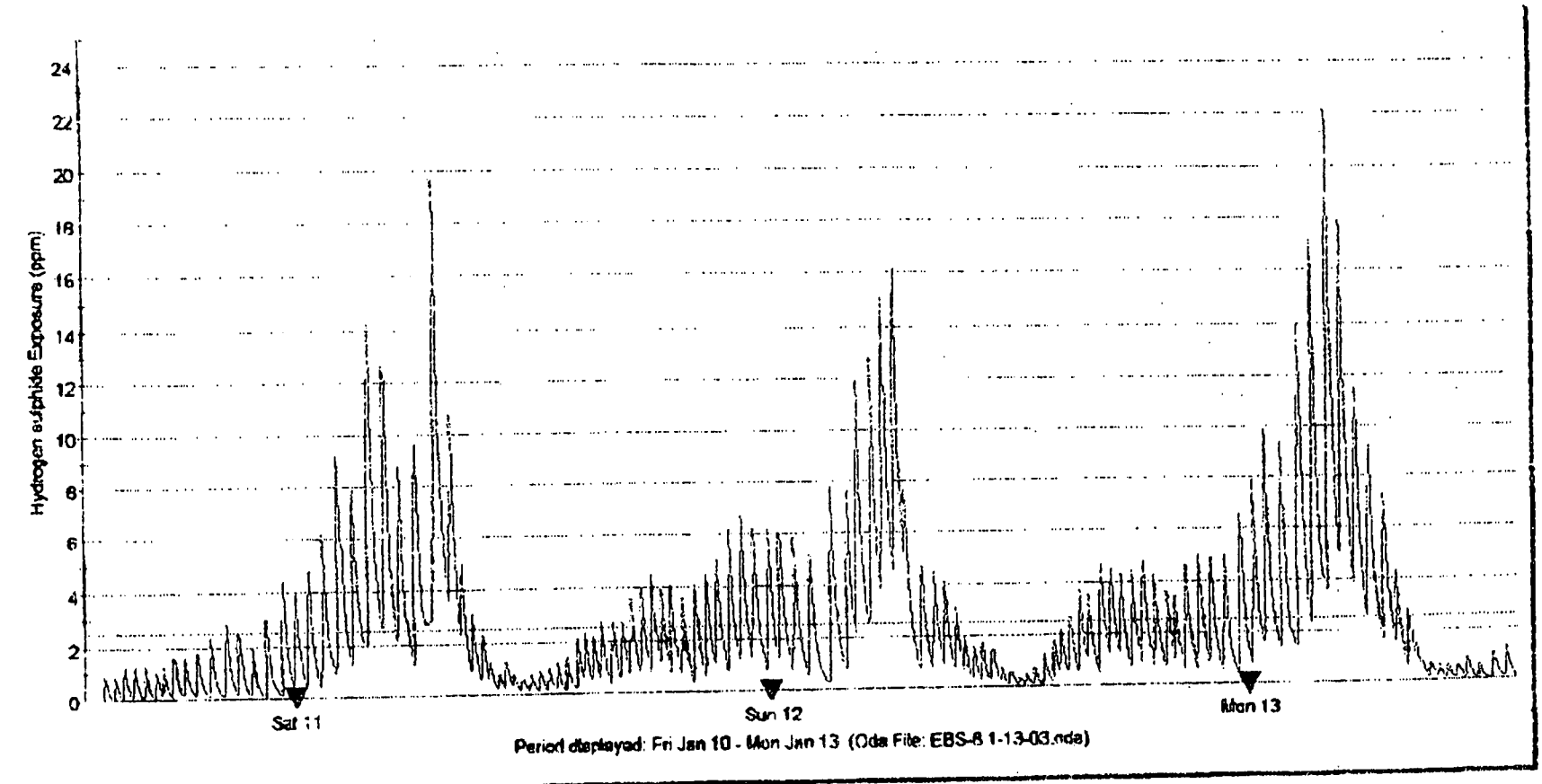


GENERATOR WAS SHUT OFF FROM MON AT 1900HRS TO 0730 ON TUES.



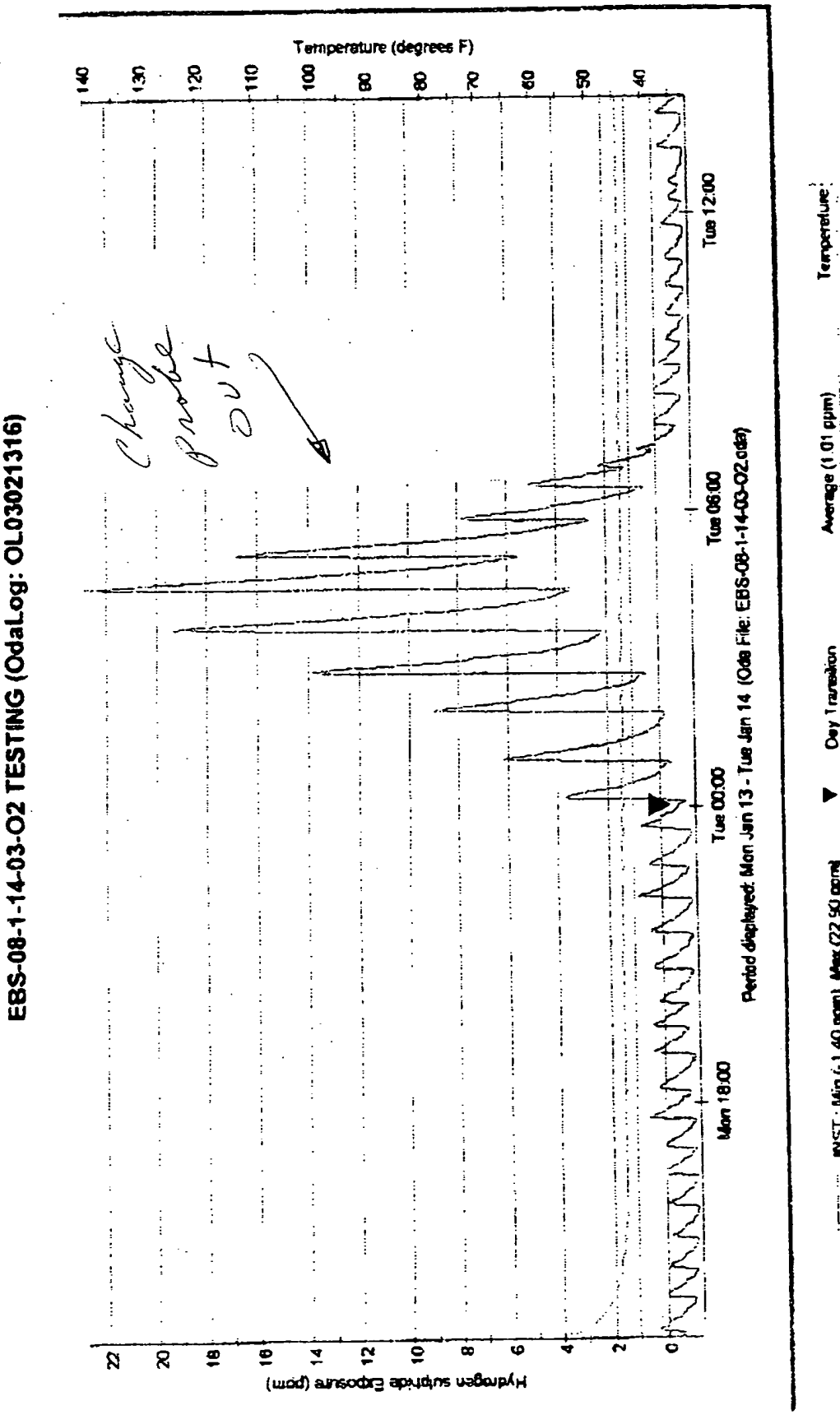
OZONE GENERATOR ON AT EBS 8

EBS 8 1-13-03 (OdaLog: OL05102433)



O2 GENERATOR IS RUNNING AT EBS - 8

4


EBS-08-1-14-03-O2 TESTING (OdaLog: OL03021316)
Temperature (degrees F)
Hydrogen sulfide Exposure (ppm)
Change probe out
Tue 12:00
Tue 06:00
Tue 00:00
Mon 18:00
Period displayed: Mon Jan 13 - Tue Jan 14 (Oda File: EBS-08-1-14-03-02.oda)
INST: Min (-1.40 ppm) Max (22.50 ppm)
Day Transition
Average (1.01 ppm)
Temperature
ORP +34, OUTSIDE TEMP 16, SAMPLE TEMP 47, PH 8.29, SII FINE 0